

THE NEW COMBINATION *LUCIDOTA ARMATA* AND A
NOTE ON *LUCIDOTA EUCERA*
(COLEOPTERA: LAMPYRIDAE)

By FRANK A. McDERMOTT¹

Lucidota armata (Gorham), NEW COMBINATION

Photinus armatus Gorham, 1884. Biol. Centr.-Amer., Ins., Coleop.
3(2):265, pl. 12, fig. 2.

It is somewhat difficult to understand why Gorham called this species *Photinus* in spite of his explanation; however, his use of *Photinus* included also *Macrolampis*, *Ellychnia*, and some species now listed as *Lucidota*. As some features of *Lucidota armata* are not developed by Gorham, a redescription of the species is given below. The species was described from Panamá. I have received 7 males and 4 females from Peru.

One of the seven males was selected for this description, collected at Avispas, Peru, September 10, 1962, by Luis E. Peña.

Dimensions, 6.0 mm. long by 1.8 mm. broad; subparallel. Superficially resembles *Pyropyga*.

Pronotum, 0.95 x 1.6 mm.; semi-elliptic; broad black panduriform vitta from base to above eyes, with a narrow median channel. Base a smooth curve, leaving the angles acute and produced. Borders transparent except tinged brownish forward of the black vitta. Disk pink between vitta and lateral borders; latter coarsely punctate, disk very finely so; sparse, short pale villosity. Scutellum relatively large, black, finely punctulate, sparsely hairy. Mesonotal plates black.

Elytra, 4.4 x 0.9 mm.; translucent dark brown, appearing black over body; very narrow explanate margins slightly paler than disk. Very rugose, with fairly dense villosity especially pronounced on sides and suture; latter not pale.

Frons dark brown, slightly concave. Maxillary palpi very short and blunt; brown. Labial palpi very small, terminal article securiform, pale yellowish. Mandibles small. Antennae broad, compressed, black, except last article white; slightly serrate; 3.45 mm. long.

Prosternum pink, meso- and metasterna practically black. Ventral abdominal segments 2 to 7 reddish brown; 8th long, medially convex, with sharp median point, apically black. 9th (genital) segment large, like convex portion of 8th (fig. 1).

Abdominal tergites and pygidium black, latter convex, posterior edge rounded.

Posterior coxae and femora whitish.

Aedeagus composed of a slightly curved, medially channeled median lobe and two unsymmetrical lateral lobes, one of which (the left) is divided into a narrow spirally twisted portion with a very acute apex which may form a hook in some specimens, and a shorter portion bearing a strong recurved hook. Right lateral lobe bears a long yellow projection with a small protuberance on the side; this structure projects at a right angle to the body on the right side in dorsal view in three specimens.

Gorham gives no explanation of his aedeagal drawings, in which *a* is apparently a lateral view with the lateral lobes removed, and *b* is a ventral view of the median lobe. Both of these agree with the present specimens from Peru. Sketch *c* represents the complicated arrangement of the lateral lobes and differs from my specimens in that the spiral twist

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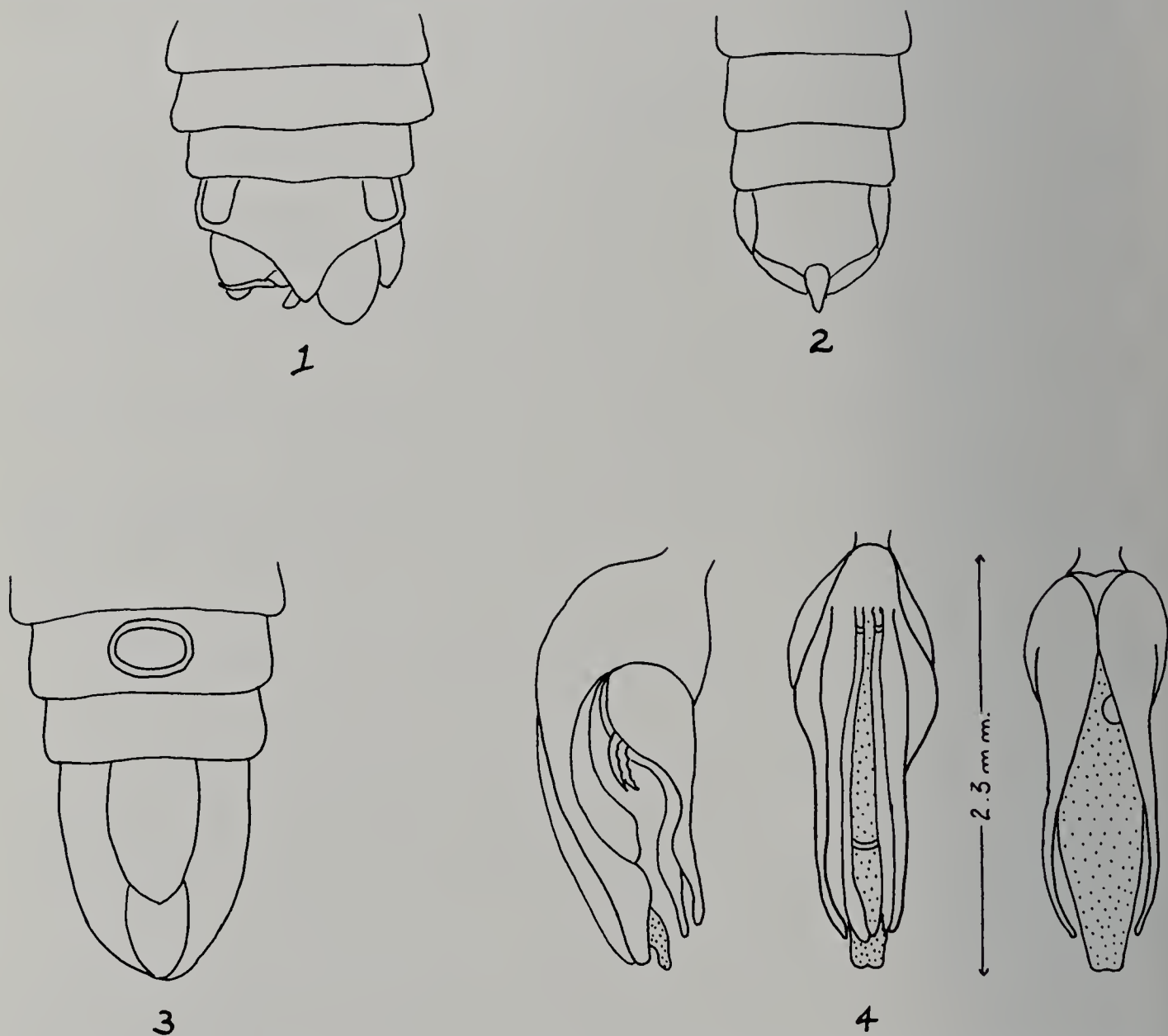
and acute point of one of the portions of the left lobe is not well indicated, nor is the recurved hook on the other portion; the third (right hand) member in his sketch *c* is the right lateral lobe with the projection shown at an angle different from its appearance in my specimens. The entire arrangement is very complicated for a lampyrid.

One female collected at Avispas, Peru, October 1, 1962, by Luis E. Peña was selected for comparison with the male.

Dimension, 6.5 mm. long by 2.05 mm. broad; subparallel. Generally similar to male; antennae nearly as long. Last ventral segment broadly subtriangular, notched apically; larval luminous organs pronounced, possibly functional (fig. 2).

Variations: the pronotal vitta may be reduced to scattered spots, leaving the disk mainly salmon-pink. In some specimens two or three distal antennal articles are white. Total length varied up to 7.5 mm.

In view of the remarkable terminalia this species should perhaps be made the type of a new genus, as suggested by Gorham.



FIGURES 1-2, *Lucidota armata*. 1—Outline of posterior ventral segments of male; note projecting point at left side of segment 8. 2—Outline of posterior ventral segments of female.

FIGURES 3-4, *Lucidota eucera*. 3—Outline of posterior ventral segments of male; note single elliptical luminous organ on segment 6. 4—Aedeagus; left to right, lateral, ventral, and dorsal views.

Lucidota eucera E. Olivier

Lucidota eucera E. Olivier, 1907. In Wytsman's Gen. Ins. 53:20.

Three males of this species were received from Peru; the species was described from French Guiana. It has an unusual development of the genital segment (fig. 3) and a relatively large aedeagus (fig. 4).



BOOK REVIEW

THE GROUND-BEETLES (CARABIDAE, EXCL. CICINDELINAE) OF CANADA AND ALASKA, PART 3. By Carl H. Lindroth. Opuscula Entomologica Suppl. 24:201-408, figs. 102-207, 1963. (Price, kr. 35:-; \$6.85.)

This volume continues the monograph of the Canadian and Alaskan Carabidae started in 1961 (see Coleopt. Bull. 16:106). The first part, the introduction, will be published after the text has been completed.

The importance of part 3 is apparent to any student of Coleoptera when it is pointed out that the work is concerned with the genus *Bembidion*. The 161 species treated include 16 new species, bringing the total for the genus in North America to about 411 species. Most of the species occur north of Washington, D. C., to about the tree line. Thus a substantial portion of the range of the genus is covered in this work. The care in which it is written and the detail of the study make it the standard work at the present time and it will replace all previous work for years to come.

It might well be added that any Coleopterist or entomology library that does not buy this series as issued will regret it when it is no longer available at the publisher's price.—ROSS H. ARNETT, JR.

LITERATURE NOTICE

CATALOGUE OF THE CANTHONINI (COL. SCARAB.) INHABITING THE WESTERN HEMISPHERE. By M. A. Vulcano and F. S. Pereira C.M.F. Ent. Arb. Mus. Frey 15(2):570-685. 1964.—This is a synonymical list with literature citations to every mention of each genus and species. Geographical distributions by countries, a bibliography of articles not mentioned by Blackwelder, and an index are also given.